

Where Chemistry is Artistry

Specialty Esters

Dermol
Wickenol
Bernel Ester
Beantree
Elefac
Trivent
Hetester
Waxenol

Natural Emulsifiers

Mulls
Wickenol
Dermasperse

Cationic Conditioners

Necon
Nequat
Polyderm
PolyNecon

Polyurethane Thickeners

Dermothix
Dermothix Liquid

Urethane Emollients

Polyderm
Monoderm

Silicone Elastomers

NuLastic SILK
NuLastic SURF
NuLastic SILK-E

Performance Additives

Zerofome
NuSil
NuZip

Our Chemistry – Our Artistry

Specialty Esters

Alzo's multifunctional emollients provide features and benefits that address market needs and industry trends with a wide range of esters derived from vegetable and other natural sources. The highly regarded and patented **Beantree**, **Marrix SF** and **Elefac I-205** esters are all ELINCS listed and each offers distinctive features that include ECOCERT certification, a replacement for volatile silicones, an extremely mild low melting wax and an ester with an elegant skin feel which helps boost SPF in sunscreen emulsions.

Natural Emulsifiers

Dermasperse MG is a natural emulsification system based on the synergy of **Wickenol 535**, (*Wheat Germ Glycerides*) and **Mulls 2218**, (*Behenoyl Stearic Acid*). This anionic o/w emulsification system, results in a range of stable and versatile creams and lotions. The **Dermasperse MG** blend is able to emulsify high amounts of natural oils, as well naturally derived emollients such **Beantree**. The **Dermasperse MG** system can also suspend high levels of solids for use in pigmented formulations.

Cationic Conditioners

The patented **Necon** cationic complexes provide substantive conditioning in shampoos, conditioners, styling aids and hair color systems as well as long lasting emolliency in creams and lotions. **Nequat DBS** is an excellent alternative to conventional quats and greatly improves wet combing as documented in testing versus stearylalkonium chloride. **PolyNecon SA-15-D** is a water soluble polymer that provides silicone-like slip and lubricity with outstanding feel.

Polyurethane Thickeners

The **Dermothix** line of thickening agents, rheology modifiers and emulsifiers, includes **Dermothix 75** and **Dermothix 100** flakes which build viscosity and provide crystal clear clarity in surfactant and aqueous systems respectively. **Dermothix 75 Liquid** can be post-added to adjust a product's final viscosity. **Dermothix** products also provide a unique texture to finished formulations. These products produce gels that are salt tolerant and are stable in the pH range of 2-12 making them ideal for use in reactive products.

Urethane Emollients

Polyderm polymeric emollients are based on the reaction of cosmetic polyols, esters, silicones and amines with isophorone diisocyanate. This urethane bond adds many unique properties to personal care formulations including adhesion, durability and thermal and chemical stability. The popular **Polyderm PPI-CO** castor oil polyurethane provides outstanding film forming, gloss and enhanced wear in lipsticks. **Polyderm PPI-SI-WS** is a water soluble silicone polyurethane which imparts long lasting slip and emolliency to rinse-off products.

Silicone Elastomers

NuLastic Silk and **NuLastic Surf** are patented silicone crosspolymers, with grafted chains swollen in cosmetic solvents including dimethicone, cyclomethicone, isododecane, and cosmetic esters. The "scaffold" structure of the **NuLastic** polymers allows for the entrapment and controlled release of lipids and water soluble additives. The new **NuLastic Silk-E ID-LSA** is a reaction of **Polyderm** polyurethanes with **NuLastic** elastomers that produces unique and versatile multiphase emulsions.

Performance Additives

Alzo offers customized problem solving solutions for many industrial uses and applications. The **Zerofome** range of innovative foam control agents are effective for use in laundry, textile, metal working, paints, coatings, adhesives, and inks. They include both silicone and non-silicone ingredients which can be used individually or in combination. The **NuZip** and **NuSil** lubricants provide outstanding mold release and friction reduction in specialized processes. **Zerokorod** corrosion inhibitors help prevent flash rusting prior to painting.

ALZO International Inc.